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10/670,582	09/25/2003	Clifton Harold Bromley	03SW169 / ALBRP314US	7480
7590	11/07/2006			EXAMINER KENNEDY, ADRIAN L
Susan M. Donahue Rockwell Automation, 704-P, IP Department 1201 South 2nd Street Milwaukee, WI 53204			ART UNIT 2121	PAPER NUMBER

DATE MAILED: 11/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/670,582	BROMLEY ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Adrian L. Kennedy	2121	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 08 August 2006.

2a) This action is **FINAL**.                    2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-40 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 1-40 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All    b) Some \* c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)	5) <input type="checkbox"/> Notice of Informal Patent Application
Paper No(s)/Mail Date _____.	6) <input type="checkbox"/> Other: _____.

***Examiner's Detailed Office Action***

1. **Claims 1-40** were originally presented. After the first Non-final Office Action, claims 1, 18, 24, 29, 33, and 35-40 were previously amended. Claims 1-40 are still pending in the instant application.
2. **Claims 1-40** will be examined.

***Claim Rejections - 35 USC § 101***

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 1-23, 37-38, and 40 are rejected under 35 U.S.C 101 as being directed to nonstatutory subject matter.

Claims 1 and 18 are directed towards a system that renders data. The language of the claims suggest that the components of claimed systems described software modules, and not physical devices.

Computer programs claimed as computer listings per se, i.e., the description of expressions of the programs, are not physical "things". They are neither computer components nor statutory processes, as they are not "acts" being performed. Such claimed computer programs do not define any structural and functional interrelationships between the computer program and other claimed elements of a computer which permit the computer program's functionality to be realized. In contrast, a claimed computer readable medium encoded with a computer program is a computer element which defines structural and functional interrelationships between the computer programs and the rest

of the computer which permits the computer program's functionality to be realized, and is thus statutory.

Therefore, claims 1 and 18 are directed to non-statutory subject matter. Claims 3-23 are rejected as being dependent on previously rejected claims 1 and 18. Additionally, embodying a non-functional algorithm on a physical medium and/or combining said non-functional algorithm with a physical device does not qualify said algorithm for patentability under 35 U.S.C 101.

Even though claims 37-40 contain a method in preamble, their bodies don't contain steps of a method. Thus, these claims are interpreted in a similar way to the system claims 1 and 18. The limitation of claims 37-40 correspond to software modules. Therefore, these claims are rejected on the same basis as claims 1 and 18.

***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 37-40 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claimed the subject matter which the applicant regards as the invention. The claims recite a method in the preamble; however, bodies of the claims contain no method steps.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1-28, 33-35, 37-38 and 40 are rejected under 35 U.S.C. 102(e) as being anticipated by Wolff et al. (USPubN 20003/0120714).

Regarding claim 1:

Wolff et al. teaches

(Currently Amended) A computer implemented system that renders data in an industrial automation environment (Paragraphs 0001 and 0002; disclosed as an interface for machine vision system), comprising:

a human machine interface (HMI) (P 0016; “*human/machine interface (HMI)*”)  
that presents the data in a plurality of device platforms (P 0017; “*computer (handheld, laptop or fixed PC), a Personal Digital Assistant (PDA), or another form of remote computing device*”); The examiner takes the position that the various devices taught by Wolff et al. are equivalent to the plurality of devices claimed by the applicants. Therefore, Wolff et al. anticipates applicants’ claimed invention.);

a device analyzer that determines properties associated with a plurality of devices having disparate device platforms, intended for delivery of data (P 0017; “*the processor, accordingly includes an application that supports transmission and receipt of data in a desired portable-device compatible format*”); and an HMI generator that generates code and/or data for the HMI in accordance with determined properties of the devices (P 0017; “*the processor, accordingly includes an application that supports transmission and receipt of data in a desired portable-device compatible format*”), and delivers the code and/or data to the respective devices based on attributes of the respective device platforms (P 0044; “*the PDA services layer 410 is a PDA-specific code set that supports the chosen PDA-based HMI device*”).

Regarding claim 2:

Wolff et al. teaches

(Original) The system wherein the device analyzer comprising a memory and a processor (Figs 2 and 3; processing element 280 and memory 282; page 4, paragraphs 0038 and 0039).

Regarding claim 3:

Wolff et al. teaches

(Original) The system wherein the processor utilizes artificial intelligence techniques to properly render the data (P 0052, “*...using an advanced statistical algorithm to convert*

*MVS image data to the appropriate gray level and format based upon weight factors that may favor certain characteristics of the reduced-power display of a PDA").*

Regarding claim 4:

Wolff et al. teaches

(Original) The system wherein the HMI generator automatically modifies code and/or data associated with the HMI for display on a new device for which the HMI was not originally configured, wherein the HMI is modified according to the determined properties of the new device (P 0043-0044, modifying a generic application interface into a PDA-specific interface).

Regarding claim 5:

Wolff et al. teaches

(Original) The device analyzer wherein artificial intelligence techniques are employed in connection with manipulating a mapping (P 052, “*...using an advanced statistical algorithm to convert MVS image data to the appropriate gray level and format based upon weight factors that ma favor certain characteristics of the reduced-power display PDA*”). Disclosed as mapping colors in an image data converting it to the appropriate gray level.).

Regarding claim 6:

Wolff et al. teaches

(Original) The system employed in a processing environment comprising at least one of a personal computer; a desktop computer; a laptop computer; a personal digital assistant; a hand-held computer; a cell phone; and a tablet computer (P 0017).

Regarding claim 7:

Wolff et al. teaches

(Currently Amended) The system wherein one or more of the device(s) coupled to the HMI generator is at least one of: a display; a data store; and a server (Fig. 2, display 250, P 0033).

Regarding claim 8:

Wolff et al. teaches

(Original) The system wherein the HMI generator comprising:  
a processing element that facilitates creation of one or more multi-dimensional software objects that render data in multiple dimensions and/or formats at substantially the same time (Fig. 16; P0078-0079; disclosed by making live images and displaying them in the Live Display in real time, allowing for a portion of an image to be magnified and displayed in a zoom window); and a component that obtains a common data input for the one or more multi-dimensional software objects (Fig. 2, image element 202; P 0030).

Regarding claim 9:

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Wolff et al. teaches

(Original) The system wherein specific data is assigned to a software object (P 0066; disclosed as HTML objects).

Regarding claim 10:

Wolff et al. teaches

(Original) The system wherein the data varies at least one of size; color; translational location; rotation of a software object: text; audio; video; visibility; enable/disable state; object state; object type; object text; trending zoom level; audio volume; specification of audio clips; specification of video clips; and starting and/or stopping animation.

The examiner takes the position that Wolff et al. teaches the features of claim 10 in Paragraph 0065. Wolff et al. teaches texts, states and other data which are included in the disclosed GUI elements as menu, button, etc.

Regarding claim 11:

Wolff et al. teaches

(Original) The system wherein changes to the common data input affect the one or more multi-dimensional software objects (P 0078; images are shown in real time, therefore any change in input will affect the images).

Regarding claim 12:

Wolff et al. teaches

(Original) The system wherein the HMI generator further comprising:

- a component that associates one or more software objects with one or more physical devices (Fig. 2, images sensor 220; P 0031); and
- a component that generates software objects wherein the one or more software objects are associated with data corresponding to the one or more physical devices (P 0043),
  - the physical devices affecting changes to the software objects and the software objects affecting changes to the physical devices (P 0085; disclosed by establishing a two-way communication between the sensor's communication interface and controller's interface).

Regarding claim 13:

Wolff et al. teaches

(Original) The system wherein the one or more software objects imported from an outside source (P 0046, generic application that includes GUI objects is loaded over the communication link).

Regarding claim 14:

Wolff et al. teaches

(Original) The system further comprising an interface to facilitate selection of data to associate with physical devices (Fig. 9; P 0069; setup page).

Regarding claim 15:

Wolff et al. teaches

(Original) The system further comprising an interface to facilitate selection of specific attributes of software objects corresponding to data associated with physical devices (P 0065).

Regarding claim 16:

Wolff et al. teaches

(Original) The system further comprising: a component that renders data based on one or more of a user access data level, a data type and a data state wherein the component is employed in an HMI residing in a processing environment (P 0066; disclosed as a web browser).

Regarding claim 17:

Wolff et al. teaches

(Original) The system of claim 16 further comprising a user-based association between displayed data and at least one of: a user access level; a data type; and a data state (Fig. 8 owner window 818, P 0067 discloses associating data with a particular user)

Regarding claim 18:

Wolff et al. teaches

(Currently Amended) A computer implemented system that renders data in an industrial automation environment (Paragraphs 0001 and 0002; disclosed as an interface for machine vision system) comprising:

a human machine interface (HMI) (P 0016; “*human/machine interface (HMI)*”) that presents the data to an operator (P 0033; “*the HMI device includes a display 250 capable of displaying*”); The examiner takes the position that the HMI device displaying to a device operator is inherent in the teaching of Wolff et al.); a component that determines if the format and/or sub-format of the data is known to the system (P 052, application software converts image data from an MVS format to a format acceptable in a PDA. This implies that the software determines if the format and/or sub-format of the data is known to the PDA); and an artificial intelligence component that determines the format of unknown data received by the HMI (P 0052, see previous explanation); and a processing component that process and renders the data in the HMI in a suitable format (P 0078).

Regarding claim 19:

Wolff et al. teaches

(Original) The system wherein the artificial intelligence locates and renders a partial data set (P 0054).

Regarding claim 20:

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Wolff et al. teaches

(Original) The system wherein further comprising a memory which stores previously unknown data types to compare with future data (P 0051, "...the memory organization is altered so that it comports with the format preferred by a PDA).

Regarding claim 21:

Wolff et al. teaches

(Original) The system wherein the HMI renders the data into at least one of text; audio; video; static image(s); and interactive image(s) (P 0078, displaying images in real time).

Regarding claim 22:

Wolff et al. teaches

(Original) The system wherein in providing an error message when data cannot be rendered )P 0066; disclosed rendering through a web browser. It is inherent for a web browser such as Microsoft's Internet Explorer to provide an error message when data cannot be rendered).

Regarding claim 23:

Wolff et al. teaches

(Original) The system wherein data is rendered in a format and/or sub-format suitable to the display capabilities of the device on which the data is to be presented (P 0056).

Regarding claim 24:

Wolff et al. teaches

(Currently Amended) A method to display data based at least in part on a zoom level selected by a user comprising:  
displaying data associated with process points in a plurality of disparate views, the data can be hidden or exposed to the user in respective disparate views (P 0054); and  
displaying respective views associated with a corresponding zoom level (P 0079).

Regarding claim 25:

Wolff et al. teaches

(Original) The method further comprising:  
presenting data associated with a zoom level chosen by the user (P 0054); and  
suppressing data associated with a zoom level chosen by the user (P 0079).

Regarding claim 26:

Wolff et al. teaches

(Original) The method further comprising assigning the data and the zoom levels (P 0079, selecting portion of an image for zooming using a stylus and displaying on the Live Image screen).

Regarding claim 27:

Wolff et al. teaches

(Original) The method further comprising allowing the zoom level and the data to be associated in a port-linear relationship (P 0079, selected area of any size can be magnified to fill the screen. That implies a non-linear relationship since the screen size is not linearly related to the size of an area to be zoomed).

Regarding claim 28:

Wolff et al. teaches

(Original) The method further comprising an artificial intelligence component capable of inferring a default zoom level based on a user preference (P 0079, user expresses the preferences by selecting an area with a stylus; selected area is zoomed to a default level by fitting selected image to fill the screen).

Regarding claim 33:

Wolff et al. teaches

(Currently Amended) A computer implemented method that facilitates rendering of data in an industrial automation environment (Paragraphs 0001 and 0002; disclosed as an interface for machine vision system), comprising:  
determining formatting requirements (P 0052, application software converts image data from an MVS format to a format acceptable in a PDA. This implies that the software determines if the format and/or sub-format of the data is known to the PDA) associated with a plurality of devices having disparate platforms, intended for delivery of data (P

0017; “*computer (handheld, laptop or fixed PC), a Personal Digital Assistant (PDA), or another form of remote computing device*”; The examiner takes the position that the various devices taught by Wolff et al. are equivalent to the plurality of devices claimed by the applicants. Therefore, Wolff et al. anticipates applicants’ claimed invention.); and formatting the data respectively in accordance with the determined formatting requirements of the devices (Page 6, left column, lines 12-16); delivering the formatted data to the respective devices (Page 6, left column, line 16-21); displaying (P 0044; “*creation of a specific set of GUI display screens and buttons*”) the formatted data based on attributes of the respective device platform.

Regarding claim 34:

Wolff et al. teaches

(Original) The method further comprising reformatting data associated with an existing HMI for delivery to a newly detected device based on the determined formatting requirements of the newly detected device (P 0043-0044, modifying a generic application interface into a PDA-specific interface).

Regarding claim 35:

Wolff et al. teaches

(Currently Amended) A computer implemented method that facilitates rendering of data in an industrial automation environment (P 0001-0002; disclosed as an interface for a machine vision system) comprising:

receiving data from a physical device to an HMI (Page 6, left column, lines 1-10);

and

comparing the data format to data formats known to the HMI (Page 6, paragraph

0052; converting image formats inherently implies comparing the formats); and

determining the format of unknown data received by the HMI (Page 6, paragraph

0052, application software converts image data from an MVS format to a format

acceptable in a PDA. All new data received by a PDA is considered to be

unknown PDA, therefore, converting); and

processing (P 0052, disclosed as formatting); and

rendering the data in the HMI in a suitable format (P 0078).

(Currently Amended) A computer implemented system that renders data in an industrial automation environment (Paragraphs 0001 and 0002; disclosed as an interface for machine vision system), comprising:

a human machine interface (HMI) (P 0016; “*human/machine interface (HMI)*”)

that presents the data in a plurality of device platforms (P 0017; “*computer*

*(handheld, laptop or fixed PC), a Personal Digital Assistant (PDA), or another*

*form of remote computing device*”); The examiner takes the position that the

various devices taught by Wolff et al. are equivalent to the plurality of devices

claimed by the applicants. Therefore, Wolff et al. anticipates applicants’ claimed

invention.);

a device analyzer that determines properties associated with a plurality of devices having disparate device platforms, intended for delivery of data (P 0017; “*the processor, accordingly includes an application that supports transmission and receipt of data in a desired portable-device compatible format*”); and an HMI generator that generates code and/or data for the HMI in accordance with determined properties of the devices (P 0017; “*the processor, accordingly includes an application that supports transmission and receipt of data in a desired portable-device compatible format*”), and delivers the code and/or data to the respective devices based on attributes of the respective device platforms (P 0044; “*the PDA services layer 410 is a PDA-specific code set that supports the chosen PDA-based HMI device*”).

Regarding claim 37:

Wolff et al. teaches

(Currently Amended) A computer implemented system facilitates rendering of data in an industrial automation environment (Paragraphs 0001 and 0002; disclosed as an interface for machine vision system), comprising:

means to determine properties associated with a plurality of devices intended for delivery of data (P 0050, properties of PDA are determined when a communication with MVS is established; see also paragraph 0047 for additional disclosure of properties established through a handshaking process); and

means to format the data respectively in accordance with the determined properties of the devices (P 0044); and means to deliver the formatted data to the respective devices (P 0050, “*...machine vision program is stored in the sensor's program memory 284 (or another dedicate memory), and is transferred into the PDA when requested by the PDA via the PDA services layer*”).

Regarding claim 38:

Wolff et al. teaches

(Currently Amended) A computer implemented system that facilitates rendering of data in an industrial automation environment (Paragraphs 0001 and 0002; disclosed as an interface for machine vision system) comprising:

means to determine if a format of the data is known to the system (P 0052, application software converts image data from an MVS format to a format acceptable in a PDA); and

means to determine the format of unknown data received by the HMI (P 0052; all new data received by a PDA is considered to be unknown by PDA, therefore, converting image formats implies determining the format of such data); and means to process and render the data in the HMI in a suitable format (P 0078).

Regarding claim 40:

Wolff et al. teaches

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(Currently Amended) A computer implemented system that displays data based at least in part on a zoom level selected by a user comprising:

means to display data associated with process points in a plurality of disparate views, the data can be hidden or exposed to the user in respective disparate views (P 0054); and

means to display respective views associated with a corresponding zoom level (P 0079).

8. Claims 29-32, 36 and 39 are rejected under 35 U.S.C. 102(b) as being anticipated by Shteyn (USPN 6,199,136).

Regarding claim 29:

Shteyn teaches

(Currently Amended) A computer implemented system that facilitates recognizing and/or creating a software object representing a physical device (col. 1, lines 57-58), comprising:

a software object generator that determines properties associated with a plurality of devices (col. 4, lines 5-25) intended for creation of the software object (C 6, L 14-17);

an HMI generator that formats data respectively in accordance with the determined properties of the devices (col. 3, lines 32-36), and

an HMI that controls the physical device (col. 2, lines 1-22; “*device control model*”; Shteyn previously taught in column 1, lines 57-58 that the HAVi control electronic devices using abstract representations of said devices) utilizing the software object representing the device.

Regarding claim 30:

Shteyn teaches

(Original) The system further comprising an artificial intelligence component utilized to recognize a new device added to the system (col. 4, lines 27-50; disclose recognition of new devices with any additional functionality that is not present in the embedded device control module).

Regarding claim 31:

Shteyn teaches

(Original) The system further comprising recognizing substantially all the components coupled to the system (col. 4, lines 20-25).

Regarding claim 32:

Shteyn teaches

(Original) The system further comprising a mapping element to provide connectivity to the physical devices (col. 3, lines 37-39).

Regarding claim 36:

Shteyn teaches

(Currently Amended) A computer implemented method that facilitates recognizing and/or creating at least one software object representing at least one physical device (col. 1, lines 57-58), comprising:

determining the I/O and communications protocol of the at least one physical device (con. 4, lines 5-25); and

formatting the data respectively in accordance with the determined properties of the devices (col. 3, line 65 through col. 4, line 5; disclosed by choosing a corresponding set of commands based on the capabilities of a registered device);

creating a software object representing the device with I/O to interface with the physical device (col. 6, lines 14-17); and

controlling the physical device utilizing the software object representing the device (col. 2, lines 1-22; “*device control model*”; Shteyn previously taught in column 1, lines 57-58 that the HAVi control electronic devices using abstract representations of said devices).

Regarding claim 39:

Shteyn teaches

(Currently Amended) A computer implemented system that facilitates recognizing and/or creating at least one software object representing at least one physical device (col. 1, lines 57-58, comprising:

means to generate at least one software object by determining properties associated with a plurality of at least one of the devices intended for creation of the at least one of the software objects (col. 4, lines 5-25); and means to format the data respectively in accordance with the determined properties of the devices (col. 3, line 65 through col. 4, line 5; disclosed by choosing a corresponding set of commands based on the capabilities of a registered device); means to create at least one or more software objects representing the at least one device with I/O to interface with the at least one physical device (col. 6, lines 14-17); and means to control the physical device utilizing the software object representing the device (col. 2, lines 1-22; “*device control model*”; Shteyn previously taught in column 1, lines 57-58 that the HAVi control electronic devices using abstract representations of said devices).

#### ***Response to Arguments***

Applicant’s arguments filed on July 28, 2006 have been fully considered but they are not persuasive. The unpersuasive arguments made by the Applicant are stated below:

In reference to Applicant’s argument:

In particular, amended claim 1 recites: *a system that renders data in an industrial automation environment, comprising: an HMI that presents the data in a plurality of device platforms; a device analyzer that determines properties associated with a plurality of devices having disparate device platforms, intended for delivery of data; and an HMI generator that generates code and/or data for the HMI in accordance with determined properties of the devices, and delivers the code and/or data to the respective devices based*

*on attributes of the respective device platforms.* Amended claim 29 additionally recites *an HMI that controls the physical device utilizing software object representing the device.*

Examiner's response:

Regarding claims 1-23, 37-38, and 40 the examiner maintains that a useful, concrete and tangible result is not produced. The position of the office is that data manipulations without a real world result are non-statutory. Additionally, embodying a non-functional algorithm on a tangible medium is additionally non-statutory.

In reference to Applicant's argument:

Applicant's claimed subject matter as recited in amended claim 1 (and similarly independent claims 33 and 37) relates to *a system that renders data in an industrial automation environment. An HMI present the data in a plurality of device platforms. A device analyzer determines properties associated with a plurality devices having disparate device platforms, intended for delivery of data. An HMI generator generates code and/or data for the HMI in accordance with determined properties of the devices, and delivers the code and/or data to the respective devices based on attributes of the respective device platforms.* Wolff et al. does not disclose or suggest these novel features.

Examiner's response:

The references teach the use of an HMI as claimed by the applicant. Applicants are trying to draw a distinction between an HMI and the use for an HMI. However, such distinction, if any, is a distinction without a difference since an HMI without a use is merely a collection of algorithm. This is not the case with the prior art which shows the invention as claimed by applicant's as set forth above.

Wolff et al. does show the presenting of data in a plurality of device platforms and based on the respective platforms. The use of a plurality of devices is taught in the statement "*this portable device can be a web-browser equipped computer (handheld, laptop or fixed PC) a Personal Digital Assistant (PDA), of another form of remote computing device*". The presenting

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of data based on the platform is shown in the statements “*a generic web browser application or another specialized interface application*” and *transmission and receipt of data in a desired portable-device compatible format*”.

In reference to Applicant’s argument:

Amended claim 18 (and similarly independent claims 35-38) relates to *a system that renders data in an industrial automation environment including, a component that determines if the format and/or sub-format of the data is known to the system, and an artificial intelligence component that determines the format of unknown data received by the HMI...*

Examiner’s response:

The artificial intelligence component used in Applicants’ claimed invention is used determine the format of the data received by the HMI. The examiner takes the position that the determination of the artificial intelligence component in the applicant’s claimed invention is then used to determine if the data is of an acceptable format for the subject device. The examiner takes the position that Wolff et al. teaches this process in Paragraph 0052. The broad teaching of using a variety of techniques to convert data from one format to a format acceptable in a PDA (P 0052; “*a variety of techniques can be employed for converting image data from an MVS format to a format acceptable in a PDA*”) anticipates Applicants’ specific claiming of an artificial intelligence component for the same purpose.

In reference to Applicant’s argument:

Amended claim 24 (and similarly independent claim 40 relates to *a method to display data based at least in part on a zoom level selected by a user including displaying data associated with process points in a plurality of disparate views, the data can be hidden or exposed to the user in respective disparate views, and displaying respective views associated with a corresponding zoom level...*

Examiner's response:

The examiner take the position that data associated with process points in a plurality of disparate views, the data can be hidden or exposed to the user in the respective disparate views, as claimed by the Applicants, are equivalent to the display images (data associated with process points) and portions of the field of view (plurality of disparate views) which are taught be Wolff et al. in Paragraph 0052. Furthermore, if an image data processing point is not in the field of view, it would be hidden from the user, and if the image data processing point is in the field of view it would be exposed to the user. Additionally, Wolff et al. teaches the use of selectable zoom which the examiner finds to be equivalent to the "displaying of respective views associated with a corresponding zoom level". Therefore, Wolff et al. anticipates the claimed invention of claims 24 and 40 and any depending claims.

In reference to Applicant's argument:

Applicant's claimed subject matter as recited in amended claim 29 (and similarly independent claims 36 and 39) relates to a system that facilitates recognizing and/or creating a software object representing a physical device. A software object generator is included that determines properties associated with a plurality of devices intended for creation of the software object. An HMI generator formats data respectively in accordance with the determined properties of the devices. An HMI controls the physical device utilizing the software object representing the device...

Examiner's response:

Shteyn teaches that the goal of the HAVi is to ensure interoperability among products from varying vendors so the products can cooperate to perform application tasks (col. 1, line 20-24). Shteyn goes on to teach that HAVi compliant devices contain a device control model that facilitates the execution of HAVi bytecode (col. 2, line 1-22). The examiner takes the position that the process of a physical device executing HAVi bytecode that is generated, based on

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abstract representation of CE devices is equivalent to the process of the HMI controlling a physical device utilizing the software object representing the device. Therefore, Shteyn anticipates applicant's claimed invention of claims 29-32, 36 and 39

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Adrian L. Kennedy whose telephone number is (571) 270-1505. The examiner can normally be reached on Mon -Fri 8:30am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Knight can be reached on (571) 272-3687. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ALK



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